the level of methylation at the genetic locus of SEQ ID NO: 11 in the genomic DNA obtained from the sample being determined by high-resolution melt (HRM) analysis, HRM comprising the steps of:

i) isolating the genomic DNA from the sample and optionally, the control sample;

ii) treating the isolated genomic DNA with bisulfite;

iii) polymerase chain reaction (PCR) amplifying the genetic locus of SEQ ID NO: 11 to produce the corresponding amplicon, the PCR amplifying being performed using a primer pair comprising SEQ ID NOs: 12 and 13; and

iv) determining the melting temperature of the amplicon; and

v) identifying the sample as containing, or not containing, the blood cell based on the melting temperature of the amplicon corresponding to the genetic locus of SEQ ID NO: 11 in the genomic DNA isolated from the sample.

2. The method of claim **1**, wherein the control sample is obtained from a known blood cell or a cell other than the blood cell known to have methylation level at SEQ ID NO: 11 to be different from the methylation level at SEQ ID NO: 11 in the known blood cell.

3. The method of claim **1**, wherein the cell other than the blood cell is a vaginal epithelial cell, a buccal cell, or a sperm.

4. The method of claim **1**, wherein the sample is a forensic sample.

5. The method of claim **1**, wherein the sample is processed to separate a cell suspected to be the blood cell before step (i) of isolating the genetic material.

6. A method for determining the level of methylation at the genetic locus of SEQ ID NO: 11 in a genomic DNA isolated from a cell, the method comprising the steps of:

i) isolating the genomic DNA from the cell;

ii) treating the isolated genomic DNA with bisulfite;

iii) PCR amplifying the genetic locus of SEQ ID NO: 11 to produce the corresponding amplicon, the PCR amplifying being performed using a primer pair comprising SEQ ID NOs: 12 and 13; and

iv) determining the melting temperature of the amplicon; and

v) identifying the level of methylation at the genetic locus of SEQ ID NO: 11 in the genomic DNA isolated from the cell based on the melting temperature of the amplicon produced in step iii).

7. The method of claim **6**, wherein the cell is isolated from a forensic sample.

8. The method of claim **7**, wherein the cell isolated from the forensic sample is suspected to be a blood cell.

9. A kit comprising a primer comprising SEQ ID NO: 12 and a primer comprising SEQ ID NO: 13.

10. The kit of claim **9**, further comprising one or mere primer pairs selected from:

i) SEQ ID NOs: 2 and 3,

ii) SEQ ID NOs: 7 and 8, and

iii) SEQ ID NOs: 17 and 18.

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